THE USE OF INTERACTIVE LEARNING TECHNOLOGIES IN HIGHER SCHOOL

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Abstract. The concept of "interactive technology" has been explored, attention has been focused on the possibilities of interactive technology optimum use in the process of learning in higher school; the algorithm of interactive learning implementation in the educational process of higher school has been considered (interactive technology can be used at different stages of training: during the initial mastering of knowledge, while consolidation and improvement of knowledge, while the formation of skills. It can be used as a fragment of a lesson to achieve a certain goal or to conduct the whole lesson using a specific technology); the basic tasks of interactive training have been characterized (development of communicative skills, establishing of emotional contacts; solving information problems, development of common educational and scientific skills, achieving of educational purpose, introducing teamwork ...) and types of interactive technologies, used in the process of learning (programmed learning, problem training, gaming technology, case technology).

Key words: interactivity, activization of educational process, learning technology, interactive technologies, interactive learning, higher school.

Modern higher education is going through the painful process of establishment, avoiding total unification and standardization of the educational process. Problems of educational innovation are brought to the prior level of scientific pedagogy problems. Therefore, solution of pedagogical problems needs a broad innovation search with a quite extensive scope. It involves organizational, functional and conceptual transformations. Technologies of modelling and design of the educational process gain particular importance in modern pedagogy. Reforming the forms and methods of training is manifested in the rise of the dialog forms of communication of educational activities subjects, transformation of methods of control of students' knowledge and skills into self-control and a rating control.

First of all, this refers to the readiness of the modern educator to innovation activity, which includes the ability to mastering the new technology in the professional sphere, significant increase in the level of autonomy and decision making; mobility of education, adaptation to the new requirements of the labour market; enhancing the solidity of education in terms of continued growth of scientific technologies, automation of manufacturing processes; the mastering and use of information and communication technologies in the professional activity. Regarding these facts, the quick change of the content and nature of professional activities on the basis of new pedagogical technologies introduction requires a teacher with a new skill level, the basics of which are formed in higher educational establishment.

It is clear that the reform of education and the introduction of new learning methods require additional efforts and the readiness of all participants of the educational process. The problem of tehnologization of education has found its reflection in the works of A.Disterveh, Y. Pestalozzi, J.-J. Rousseau, A. Makarenko, Y. Comensky, V.Sukhomlynsky, K. Ushynsky, D. Dewey, and further researches of modern teachers and trainers such as V. Bezpal′ko, G. Ilyin, M. Klarin, G. Vashchenko, A. Blons′ky, M. Danilov, O.Piehota, T. Selevko and others, much attention is paid to theoretical explanation of the relevance of innovative technologies, their importance in the educational process. Problems of improving the teaching process in higher school were studied by Y. Bolibash, A. Verbitsky, O.Gura, L. Tkachuk, T. Dmytrynko, V. Popkov, V. Kuzovlev, M. Prykhodko, Y.Prysiazhniuk, A. Suchchenko, G. Cherniy, T. Suchchenko and others.

Interactive technology is an important factor of personality-oriented developing training. The most characteristic indication of cognition method is that the educational process takes place under the condition of constant activity of all students. Online training instructor is the organizer of

the process, the consultant. The process of training is co-education, where the teacher and students are equal partners. They define the purpose, object, subject, means and the results of the study teamwise. During this joint search they exchange opinions, knowledge, and ways of activity that leads to reflection and evaluation of the obtained results [1]. This allows students to realize what they have reached at a certain stage of knowledge, what they know and how their personal experience of creative activity has enriched and to take responsibility for the results of training.

Interactive means the ability to interact or to be in a conversation, a dialogue with something (e.g. a computer) or someone (e.g. a person). So, online training is, first of all, the dialog training, when the interaction takes place. Interactive training is a dialog one, when a teacher interacts with a student; a special form of cognitive activity with quite specific and predictable targets.

According to O. Zubenko, the essence of interactive learning lies in co-training - group form of educational process organization with the implementation of active group training techniques in order to solve didactic problems. The teacher in this case acts as an assistant, adviser, organizer, performs the function of information source. However, the student and the teacher act as equal subjects of the educational process. Interaction eliminates the dominance of thoughts, viewpoints of one participant over others, but taking the specific experiences and practical application into account is a must. During such dialog training students learn to think critically, solve complex problems based on analysis of circumstances and relevant information, observe alternative thoughts, take the thoughtful decisions, participate in discussions, communicate with other people [2].

The idea of interactive technologies lies in the fact that the process of cognition takes place under conditions of constant active interaction between all participants in the educational process. Depending on the purpose and forms of organization of educational activity, interactive technologies can be divided into interactive technologies of cooperative learning, collectively-group training, condition simulation, discussion issues study [2].

The technological concept of design technology (authors K. Bahanov, V. Huzeev, I. Yermakov, O. Piehota) directs to the effective way of gaining new knowledge in the context of the particular situation and their use in practice. Method of projects as technology in modern conditions has been transformed into the project system of training, according to which the acquisition of knowledge and skills takes place in the process of planning and implementation of practical tasks. Technology of person-centered education (authors I. Yakymska, O. Savchenko, S. Podmazin) requires to create optimal conditions for the development and formation of the personality, as the subject of activities and public relations, who builds own activity and relationships in accordance with a sustainable hierarchical system of humanistic and expressive personal values.

The problems of interactive technology implementation have been discussed by Ukrainian scientists for the last ten-fifteen years. It has been repeatedly stressed at various levels that the result of non-traditional pedagogical technology introduction can significantly change the educational process, get the chance to solve the problems of developmental teaching, person-centred education, differentiation, humanization, formation of individual educational prospects.

But the debates on the use of advanced educational technologies do not stop. The majority of higher education teacher-practitioners understand the need to use new technologies in professional training, but still prefer traditional methods of learning. Still there exist the questions: what difficulties will a teacher meet in the process of advanced technologies using? What factors should be considered when using interactive technologies? Is the use of interactive technology effective or even appropriate?

Thus, there is an obvious need to overcome the mismatch between the demands to modern professional and educational technology of a particular educational institution that operates within the given time, considering changes of the external social environment. Reform of the educational system in Ukraine is an urgent necessity. Improving and enhancing the quality of education is the most important problem, which is largely driven by the processes of globalisation and the needs of positive conditions formation for individual development, socialization and realization of personal potential in contemporary society. Thus the introduction of interactive methods of work is inevitable and essential [3].

The use of innovative technologies will help the teacher to change learning situation, familiar to the student, the nature of the activity and will change the student' nature from passive observer to an active participant in the learning process. Being in the online space, the student is forced to think independently, to doubt, to address specific tasks and problems, changing the rules of interaction with the teacher and classmates.

Educational process has to take place in three stages, student acts as a partner in the educational process. At the first stage the student studies a certain object, collects information about it, constructs the images and as a result gets his own educational product. At the second stage the student has an opportunity to compare the acquired knowledge with knowledge of his fellow students and knowledge of mankind in a certain field. To achieve this aim the teacher demonstrates different forms and methods of interactive learning in the class. The third stage, general one, helps each student to create a comprehensive educational product, taking into account his own comparisons and conclusions.

We must remember that every student is a bright personality, which has a certain level of intellectual development, a certain style of perception, memorization and exploration. Besides, a teacher must take into account that a modern student is a representative of "new" information society – mobile, variable, flexible, many-sided person.

Speaking of interactive learning, we should note that it contributes to the individual approach to each student. More attention should be paid not to the swotting the material, but to the development of students' skills of communication, reflection, creation and expression of their own judgments. Interactive learning simultaneously solves the following tasks: develops communicative skills and abilities, helps establish emotional contacts; − solves the problem of information as it provides students with the necessary information, without which it is impossible to implement joint activity; − develops common training and scientific skills and abilities (analysis, synthesis, setting goals, etc.); − provides educational goal, teaching to work in a team, consider partner's thoughts. Besides, interactive learning includes relaxation, shifting attention, changing forms and etc [4].

Conducted theoretical analysis of higher educational institutions' work in Ukraine has showed that the specificity of teaching disciplines of professional and practical training varies. Teachers systematically use videos, episodes from the feature and documentary films; tape records conversations, interviews, discussions, reports, speeches, photos, diagrams, forms of unified official documents, letters, reports, memoranda, orders, directives, instructions, guidelines, regulations, plans.

In the meantime they implement a large number of active and interactive learning technologies: topical lecture, paradoxical lecture, heuristic conversation, exploratory laboratory work, situational tasks solving, collective and group training, situated learning, etc. They are used at different stages of training: during the initial mastering knowledge, while reinforcing skills and competence formation. Interactive learning can be used as a lesson fragment to achieve a certain goal or to conduct the whole lesson using special technology.

Most often in the teaching process of higher educational institutions teachers use such interactive technologies as programmed learning, problem study, gaming technology, case technology. Further we briefly describe these types of interactive technologies.

Programmed learning*.* Programmed learning provides the organization of learning when students cannot make the next step in mastering the knowledge without learning the earlier one. The educational material is divided into small portions, which are located in the exact matching sequence. Everyone works in an acceptable tempo for him, has the possibility to return to the key material, programs, adapted to the conditions of training, give individual explanations of errors, a corresponding instruction and support material is implemented. This type of interactive technology provides operational feedback, introduces self-government, self-control and correction of the educational activity, actually carries out stage by stage control of educational activity and its formation on the bases of optimally designed algorithms, forms constructive thinking.

The problem training. The characteristic feature of problem learning is that knowledge and ways of activity are not proposed handed on a plate, there are no rules or instructions, following

which the student can guaranteed perform a task. Material is not given directly, but it is given as an object of search. And the whole point of training is in stimulating students' search activity. This approach is determined by the orientation of education to foster creative personality; problematic nature of modern scientific knowledge; problematic nature of human practice, which is particularly acute manifested in the crisis moments of its development; consistencies of personality development, the human psyche, particularly thinking and interest which are formed in problem situations.

Gaming technology. In the course of the game two aspects of governance are used: instrumental and emotional-role ones. We are going to consider their specifics on each of the stages of game conducting. At the beginning of the lesson the teacher announces theme and goals, introduces students to the rules of the game, takes part in the distribution of roles, gives the necessary information to the participants. Gaming events are highlighted by means of a special organization of space gaming interactions, specific style of communication. The teacher directs his efforts to the granularity of the game situation understanding by the participants.

While manning the teams the teacher should consider interpersonal relationships that have developed in the group. In the course of the game the main types of difficulties faced by students are stood out, and are carefully analysed then. The game creates favourable conditions for criticism and self-criticism, reflection, so the teacher should focus on factors and actions that lead to success or failure. Players must make sure that the result is not random, and is associated with their competence, observation and strong inter-personal skills.

Case technology. The essence of this method is that the problem of teaching knowledge is accompanied by an organization of students' independent work. A special feature of this method is the reproduction of the problem situation on the basis of real life facts, combining them into a single informational complex that contains a key question for the solution of the task [4].

The use of interactive technologies in the educational process should be combined with afterschool activity in order to form and develop professional qualities of future specialists. The quantity of lessons, conducted in interactive form, is determined by the curriculum and the contingent; as a whole in the learning process they should be within 20% of all lessons. The lecture lessons should be within 50% of all class activity.

Organizing the educational process that relies on the use of interactive technologies, you should consider the involvement of all students in the group to the process of cognition. Collaboration means that everyone brings his own personal individual contribution; there exists the process of exchanging knowledge and ideas. The main condition of interactive education is the initiative of students in the learning process.

We can conclude that the use of interactive technologies in the learning process promotes the activization of education, forming a deep inner motivation, provides opportunities for intellectual and creative development and initiative, develops communication skills. So the use of this type of training is an integral part of the professional training of future specialists. Thus, it is necessary to update the content and methods of teaching disciplines in order to train highly qualified specialists that will be competitive on the labour market.

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